

### **REMARKS**

Claims 1-31 are pending in this application. Claims 1-31 stand rejected.

The Examiner's reconsideration of the rejection is respectfully requested in view of the above amendment and the following remarks.

#### **Rejections under 35 U.S.C § 103:**

I. Claims 1-4, 7-9, 17, 20-22, 25-27 and 31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (U.S. 6,052, 173) in view of Ohtsuki et al. (U.S. 6,078,598) and further in view of Nishi et al. (US2004/0223132).

Claim 1 and claim 17 recite, *inter alia*, a wavelength converter for directly converting the wavelength of the source light to a wavelength of about 193 nm which corresponds to the highest absorptivity of a photoacid generator of resist coated on the wafer. Claim 31 recites, *inter alia*, a wavelength converter which directly converts a wavelength of the source light to a wavelength corresponding to the highest absorptivity of a photoacid generator of resist coated on the wafer. Applicants respectfully submit that that neither Miura, Ohtsuki, Nishi, nor any combination thereof teaches or suggests the above-claimed features.

Miura does not disclose or suggest a wavelength converter which directly converts a wavelength of the source light to a wavelength corresponding to the highest absorptivity of a photoacid generator of resist coated on the wafer. The Examiner asserts that Miura discloses a wavelength corresponds to the highest absorptivity of a photoacid generator of resist coated on the wafer. See page 2 of the Office Action. Applicants respectfully disagree.

The cited portion of Miura reads:

(2) The peripheral area of wafer is irradiated with exposure light as the wafer to which the resist has been applied is turned. See Col. 1, lines 42-44 of Miura.

The above cited portion of Miura at most discloses that exposure light is irradiated on a resist applied on a wafer. However, Miura is completely silent on converting a wavelength to a wavelength corresponding to the highest absorptivity of a photoacid generator of resist. Ohtsuki and Nishi do not cure the deficiency in this regard. As such, neither Miura, Ohtsuki, Nishi, nor any combination thereof teaches or suggests a wavelength converter which directly converts a wavelength of the source light to a wavelength corresponding to the highest absorptivity of a photoacid generator of resist coated on the wafer.

Furthermore, the Examiner acknowledges that Miura does not disclose a wavelength converter for converting the wavelength of the source light to wavelength of about 193nm. See page 3 of the Office Action. As such, it is inconsistent for the Examiner to assert that Miura disclose converting a wavelength to a wavelength corresponding to the highest absorptivity of a photoacid generator of resist because 193nm is the converted wavelength corresponding to the highest absorptivity of the photoacid generator of resist in claims 1 and 17 of the present application.

As claims 2-4 and 7-9 depend from claim 1, and claims 20-22 and 25-27 depend from claim 17, they are also not rendered obvious by Miura in view of Ohtsuki and further in view of Nishi for at least these reasons.

Accordingly, withdrawal of the obviousness rejections is respectfully requested.

II. Claims 5 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. in view of Ohtsuki and Nishi and further in view of Tanaka et al. (US 5,811,211).

As stated above for claims 1 and 17, Miura, Ohtsuki and Nishi do not disclose or suggest a wavelength converter for directly converting the wavelength of the source light to a wavelength of about 193 nm which corresponds to the highest absorptivity of a photoacid generator of resist coated on the wafer, as recited in claims 1 and 17. Tanaka at the very least does not cure the above mentioned deficiency of Miura, Ohtsuki and Nishi.

As claims 5 and 23 depend from claims 1 and 17, respectively, these dependent claims are likewise patentable over Miura in view of Ohtsuki and Nishi and further in view of Tanaka.

Accordingly, withdrawal of the obviousness rejections is respectfully requested.

III. Claims 6, 10-14, 18-19 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (U.S. 6,052, 173) in view of Ohtsuki and Nishi and further in view of Yamamoto (US 4,905,037).

As stated above for claims 1 and 17, Miura, Ohtsuki and Nishi do not disclose or suggest a wavelength converter for directly converting the wavelength of the source light to a wavelength of about 193 nm which corresponds to the highest absorptivity of a photoacid generator of resist coated on the wafer, as recited in claims 1 and 17. Yamamoto at the very least does not cure the above mentioned deficiency of Miura, Ohtsuki and Nishi.

As claims 6, 10-14, 18-19 and 24 depend from claims 1 and 17, respectively, these dependent claims are likewise patentable over Miura in view of Ohtsuki and Nishi and further in view of Yamamoto.

Accordingly, withdrawal of the obviousness rejections is respectfully requested.

IV. Claims 15-16 and 29-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al. (U.S. 6,052, 173) in view of Ohtsuki and Nishi and further in view of Minemoto et al. (US 5,381,429).

As stated above for claims 1 and 17, Miura, Ohtsuki and Nishi do not disclose or suggest a wavelength converter for directly converting the wavelength of the source light to a wavelength of about 193 nm which corresponds to the highest absorptivity of a photoacid generator of resist coated on the wafer, as recited in claims 1 and 17. Minemoto at the very least does not cure the above mentioned deficiency of Miura, Ohtsuki and Nishi.

As claims 15-16 and 29-30 depend from claims 1 and 17, respectively, these dependent claims are likewise patentable over Miura in view of Nishi and further in view of Minemoto.

Accordingly, withdrawal of the obviousness rejections is respectfully requested.

For the foregoing reasons, the present application, including claims 1-31, is believed to be in condition for allowance. The Examiner's early and favorable action is respectfully requested. The Examiner is invited to contact the undersigned if he has any questions or comments in this matter.

Respectfully submitted,

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